Overview and Composting Product Approval Guidance

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WISCONSIN
DEPT. OF NATURAL RESOURCES

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OVERVIEW / WDNR Composting Product Approval Process

Background
In general, the Waste Management Program has traditionally issued Low Hazard Exemptions (LHE) on a case-by-case basis. This included staff review of our administrative rules and scientific literature (if administrative rules weren't in place), and then developing a LHE for a specific company's product and facility. This approach has been time consuming for both the entity and our staff.

While facilities (unless exempt) will still be required to obtain a site/facility approval, we have tried to streamline the product approval process. Here are three approaches available for the product approval process:

- Exemption by rule.
- Low Hazard Exemption (meeting certain criteria).
- Low Hazard Exemption (case-by-case review).

Explanation of Product Exemptions
Exemption by rule - The use of certain materials in composting is exempt by Administrative Rule (NR 518.04(1). Therefore, specific approval by the Waste Management Program is not needed. These materials include such as the following:

- Leaves, grass clippings, yard and garden debris, brush, sawdust, and clean chipped wood.
- Vegetable food waste and readily biodegradable food packaging.
- Farm crop residue, manure, and carcasses from agricultural operations.

Low Hazard Exemption (LHE) - The use of certain non-exempt materials or non-exempt materials when combined with exempt materials in composting requires a LHE. These non-exempt materials can include the following materials:

- Mixed food & food by-products.
- Readily biodegradable plastics that aren’t food packaging.
- Municipal and papermill sludge.

There are generally two LHE options available for compost products:

- Streamlined Process (materials meet certain quality criteria) - The streamlined review process, with associated WDNR guidance, is intended to help identify low risk proposals for beneficial use of compost produced by a regulated facility. The materials and procedures identified in the compost proposal, when compared to the WDNR guidance, are expected to produce compost that can be beneficially used with low environmental or public health risks. If the guidance is met, staff can then use a LHE template to create the LHE approval quickly and easily.

  Note: The associated streamlined guidance for compost doesn't create a standard for maximum allowable concentrations of parameters of concern. Proposals that do not meet the guidance criteria described in the streamlined approval guidance may still be submitted for a LHE but the request may need more detailed review and analysis to determine whether a specific low hazard exemption is needed vs. the streamlined approval process.

- Low Hazard Exemption (existing rules or case-by-case review) - Composting proposals that don't meet the streamlined approval process will continue to be accepted for LHE approval. Staff will review the submittal using our administrative rules and scientific literature, as appropriate. This process will be more time consuming for our staff and the LHE applicant as this approval process may need case-by-case review and may result in additional information be requested from the LHE applicant.

COMPOST QUALITY GUIDANCE AND STREAMLINED LOW HAZARD EXEMPTION APPROVAL

Description: This guidance is intended to help identify low risk proposals for beneficial use of compost produced by facilities regulated under s. NR 502.08, Wis. Adm. Code. The materials and procedures identified are expected to produce compost that can be beneficially used with little environmental or public health risks and are appropriate for a low hazard waste exemption under s. NR 500.08(5)(a), Wis. Adm. Code. This guidance doesn't create a standard for maximum allowable concentrations of parameters of concern. Proposals that do not meet the criteria described here may need more detailed review and analysis to determine whether a specific low hazard exemption or other approval should be issued.

Questions: If you have questions regarding this guidance, contact the Policy Section Chief in the Bureau of Waste Management.

Applicable Rules & Implementation: This guidance applies to composting feedstocks and additive materials used by, and compost products produced by, facilities regulated under s. NR 502.08, Wis. Adm. Code. This specifically addresses compliance with s. NR 502.08(6)(j), Wis. Adm. Code, related to safety of waste derived products. "Compost" and "composting" are defined in ss. NR 500.03(44) & (45), Wis. Adm. Code, respectively.

For a proposal that meets the criteria in this guidance, the attached statewide exemption under s. NR 500.08(5)(a), Wis. Adm. Code, and 289.43(8), Wis. Stats ("low hazard waste exemption") will be issued to allow public distribution and use of the compost products. In accordance with s. 289.43(8)(b)3., Wis. Stats., the exemption authorizes an individual generator to dispose of a specified type of solid waste at a site other than a licensed solid waste disposal facility.

This guidance makes recommendations on information to be collected, suitable material types for feedstocks and additive materials, testing and quality issues, information to be provided to compost users, and recordkeeping and reporting. This is consistent with s. 289.43(8)(c), Wis. Stats, which authorizes the Department to require periodic testing of the wastes and impose other conditions. Additional rules applicable to specific materials and issues are referenced throughout this guidance.

This guidance does not impact the following:

- The owner of a facility at which compost will be produced must comply with ss. NR 502.08 or 502.12, Wis. Adm. Code, related to facility location, design, operation, monitoring, and other related issues.

- Uses of certain materials (listed in Table 1) are exempt by rule, if used in accordance with the rule exemption. Uses of these materials aren't impacted by this guidance, unless the composting facility is regulated by s. NR 502.08, Wis. Adm. Code, due to accepting non-exempt materials (listed in Table 2).

Feedstock & Additive Materials: Tables 1 and 2 list materials covered by this guidance and likely to produce a compost that can be used by the public. Table 1 lists materials for which use is exempt by rule; these materials are impacted by this guidance only if processed at a facility regulated under s. NR 502.08, Wis. Adm. Code. Table 2 lists materials for which use is not exempt by rule and the facility must comply with these limitations to be covered by the statewide "low hazard" exemption for use of compost derived from these materials. Materials listed in Tables 1 and 2 may be composted individually or as part of a mixture.

Table 1. Materials Exempt by Rule

Materials	Primary Rule	Additional Rules & Technical Requirements
leaves, grass clippings, yard & garden debris, brush, sawdust, & clean chipped wood	NR 518.04(1)(i)	287.01(17), Stats., defines "yard waste" to include clean woody material 6 inches or less in diameter (smaller size is desirable for composting).

Materials	Primary Rule	Additional Rules & Technical Requirements
vegetable food waste & readily biodegradable food packaging	NR 518.04(1)(i)	NR 500.03(253) defines “vegetable food waste” to include food containers that are readily biodegradable , such as waxed or unwaxed paper products or corn starch, if contaminated with vegetable food waste by virtue of use.
farm crop residue, manure, & carcasses from agricultural operations	NR 518.04(1)(b)	NR 154 & 243 apply to management of wastes from a “concentrated animal feeding operation” (CAFO, 1,000 animal units or more/have a WPDES permit) defined in s. NR 243.03(9). NR 502.08 or 502.12 apply to composting farm wastes from facilities that aren’t CAFOs and/or don't have a WPDES permit. NR 243.15(6) allows DNR to regulate under NR 502.08 off-site composting of CAFO manure mixed with solid wastes.
soil	NR 500.08(2)(a)	NR 500.03(214) defines “soil”, which doesn’t include street sweepings, dredged material, or foundry sand.
municipal sludge	NR 204.04	NR 204.03(19) defines "exceptional quality sludge" in terms of pathogen reduction in NR 204.07(6)(a), metals concentrations in NR 204.07(5)(c), and vector attraction reduction in NR 204.07(7)(a) to (i). NR 204.06(2) allows for additional parameters & more frequent testing. NR 204.04(1) allows DNR to impose additional bulk use requirements on a case-by-case basis, if it is determined that use is occurring in a way that may deleteriously impact public health or the environment.

Table 2. Materials Not Exempt by Rule

Materials	Primary Rules	Additional Rules & Technical Requirements
mixed food & food by-products	NR 502.08	Food waste from restaurants, grocery stores, cafeterias, residences, & similar food wastes that may include meat mixed with other food wastes, but doesn’t include animal processing plant wastes.
readily biodegradable plastics that aren’t food packaging	NR 502.08	Plastics that will decompose during composting into naturally occurring elements or simple compounds & will not release hazardous by-products of concern, consistent with ATCP 137.04.
papermill sludge	NR 214	NR 214.06(1) allows DNR to exempt land treatment from specific requirements, if the applicant demonstrates a requirement is more stringent than needed to comply with NR 140 & 160, Wis. Stats.
primary nutrients (N, P, K); secondary nutrients (Ca, Mg, S, B, Cl, Co, Cu, Fe, Mn, Mo, Na, & Zn); liming materials ($CaCO_3$); & acidifiers	ATCP 40 and 41	This guidance doesn’t include quality criteria for chemicals that may be desirable additives to create specialty products. The composting facility operator should document that the chemical additives don’t include other hazardous ingredients of concern to public health or the environment. Please note that several DATCP rules may apply to certain specialty products (see Table 4).
physical contaminants	NR 502.08	May include incidental physical contaminants (materials that aren’t readily biodegradable). The applicants are encouraged to remove those physical contaminants from the compost, prior to use or making the product available to the public.

Quality of Feedstocks: Table 3 lists parameter testing for feedstocks consistent with a compost quality appropriate for public use. Test data that complies with a sludge generator's WPDES permit is acceptable (repeat testing by the composting facility isn’t needed). Table 3 footnotes provide operational criteria and other information that apply to specific parameters.

Table 3. Quality of Feedstocks

Parameters[1]	Feedstocks	Test Method	Test Frequency	Screening Values	Rules
pH	each feedstock		As needed, by operator, to assure proper composting	2<pH<12 (can't be corrosive and can't be a characteristic listed HW)	NR 600 series
C, N, P, & K	each feedstock		As needed, by operator, to assure proper composting		NR 502.08(4)(j) NR502.12(13)(e), (f) and (h)
metals with codified limits[2]	municipal sludge & papermill sludge	Methods listed in NR 219, Table EM	Odd numbered years	As….≤ 41 mg/Kg Cd…≤ 39 mg/Kg Cu….≤ 1500 mg/Kg Hg….≤ 17 mg/Kg Mo….≤ 40 mg/Kg Ni….≤ 420 mg/Kg Pb….≤ 300 mg/Kg Se….≤ 100 mg/Kg Zn….≤ 2800 mg/Kg	NR 204.07(5)(c) specifies these metals limits for "exceptional quality sludge" which can be approved for public distribution under a WPDES permit.
dioxins/furans & dioxin-like PCBs	municipal sludge & papermill sludge	Method 1613 (assume non-detect = zero)	Odd numbered years for the first five years of operation. After five years, every three years.	≤ 9.6 ppt total toxicity using "toxicity equivalency factors" (TEFs)[3]	NR 204.06(2)(b)6. "Persistent organics" to be considered for testing.
phenolics, pesticides, persistent organics, & priority pollutants	municipal sludge & papermill sludge	Methods listed in NR 219, Table C & E PCBs: a method that uses GC/ECD	Initial test to validate that the compounds are not a problem, if known to be present. Considering the feedstock materials, additional testing requirement aren't expected to be needed,	May be set on a case by case basis, per WPDES permit, or as needed to comply with a standard (ex: PCB soil standards)	NR 204.06(2)(b)5. & 6. list these additional parameters to be considered for testing NR 214

1. Waste generators have primary legal responsibility to characterize their waste and determine appropriate disposal and use. Based on the chemical inputs and processes generating a waste, it may be appropriate to test for parameters not listed in this table. Table 4 describes further considerations.

2. Facilities are encouraged to implement pollution prevention steps if a papermill sludge exceeds these metals concentrations:

As 10 mg/Kg	Hg 1 mg/Kg	Pb 30 mg/Kg
Cd 10 mg/Kg	Mo 5 mg/Kg	Se 10 mg/Kg
Cu 100 mg/Kg	Ni 30 mg/Kg	Zn 800 mg/Kg

3. 9.6 ppt is the 25th percentile from the 2000-01 Association of Metropolitan Sewerage Agencies (AMSA) survey of municipal wastewater treatment facilities (200 samples from 171 POTWs in 31 states, no detects equal zero). This limit was selected because it removes facilities that, for some reason, have significantly higher values, and reflects the need to reduce risk by accepting sludge only from facilities doing the best to control these PBTs. Median was 15.85 ppt. TEFs for 29 dioxin/furans and dioxin-like PCBs are provided in Table 7.

Quality of Compost Products: Table 4 lists parameter values for compost products consistent with a compost quality appropriate for public use. Table 4 footnotes provide operational criteria and other information that apply to specific parameters and products.

Table 4. Quality of Compost Products

Parameters[4]	Compost Type	Test Method	Test Frequency	Not to Exceed Values	Rules
pH	derived from Table 1 or 2 materials	Methods listed in NR 219, Table B	10,000 cubic yards	6<pH<8 But accepting a pH outside this range for specialty products.	NR 502.12(15)(a) NR 204.07(5)(d)2.d. Regulated by DATCP if marketed either as a liming material or acidifier (pH<5).
N, P, & K	derived from Table 1 or 2 materials	Methods listed in NR 219, Table B N: combined total as ammonia nitrite, nitrate, & TKN P & K: total P & total K	None required for DNR		NR 502.12(15)(a) NR 204.07(5)(d)2.d. NR 204.06(2)(b)2. If nutrient claim is made, DATCP regulates & nutrients must be guaranteed. 94.64(1)(e), Stats., defines “fertilizer”. ATCP 40.08(1)(d) & 40.04(1) specify analyses for fertilizers (primary and secondary nutrients, respectively).
pathogens	manure & municipal sludge	Methods listed in NR 219, Table EM	5,000 cubic yards (If public pickup is used) or 10,000 cubic yards (if the compost product is used in accordance with a Use Plan that limits contact by humans) [5&6]	Fecal coliform max. 1000 MPN / g TS based on geometric mean of at least 7 separate samples or Salmonella max. 3 MPN / 4g TS & meet pathogen reduction operational criteria[5]	NR 204.07(6)(a) NR 204.03(38) defines “pathogens” NR 204.03(25) defines "geometric mean"
stability by temperature measurement OR stability by specific oxygen uptake rate	derived only from Table 1 materials derived from Table 2 materials, or combined Table 1 & 2 materials	temperature reading Method listed in NR 219, Table EM	Weekly at several locations within the curing compost pile 10,000 cubic yards	None - doesn’t reheat at optimum oxygen & moisture None	NR 502.12(10)(h)1 NR 204.07(7)(b) NR 214

4. Compost producers have primary responsibility to characterize their product and determine appropriate use. Based on the chemical inputs and the processes generating a waste or making a product, it may be

appropriate to test for parameters not listed in this table. Compost products may be subject to a variety of DATCP rules and statutes related to product safety and distribution, for example:

- Products must be labeled to identify “hazardous substances”, defined in ATCP 100.37(1)(c), Wis. Adm. Code, to include: a substance that is toxic, an irritant, flammable or combustible, or generates pressure by decomposition or heat, if such substance may cause substantial personal injury or illness as a result of customary or reasonably foreseeable handling or use, including reasonably foreseeable ingestion by children.

- Compost product distribution for residential landscaping may meet the definition of “home improvement” in s. ATCP 110.01(2), Wis. Adm. Code.

- A compost product may meet the definition of a “fertilizer”, and if a fertilizer product contains 0.06% or more boron in a water-soluble form or 0.001% or more of molybdenum, ATCP 40.04(4) requires the label to include the word “WARNING” along with a list of crops for which the fertilizer is intended and a statement that use on other crops may result in serious damage or injury to the crop.

5. Pathogen Testing, NR 204.07(6)(a)1: Test after composting is complete but before distribution.

6. Suggested for Pathogen Reduction Operational Criteria, NR 204.07(6)(a)2.b:
   - In-vessel or static pile: 3 consecutive days at 131 degrees F.
   - Windrows: 15 days at 131 degrees F, with 5 turnings during high temperature events.

Composting Process Plan, Compost Use Plans, & Product Information: Table 5 lists contents of a composting process plan and use plans, and product information sheets and labels, likely to be appropriate for compost that will be used by businesses and the general public.

Table 5. Plans & Product Information

Document	Document Contents	What Must Be Done with the Documents?
Composting Process Plan	• Maintain a current list of feedstock & additives used. • Document (written) description of the processing equipment & methods, including pre-processing, primary processing, post-processing, & storage. • List tests that will be performed, monitoring frequency & limits for feedstock, additives, & the composting process. Document (written) how the tests are used to properly operate the composting process & control compost product quality, & describe the expected compost quality. • Document (written) how off-spec products will be handled. • Document (written) what and how records will be kept.	The operator doesn't need to submit a compost (operations) plan to DNR for review but needs to assure that their operation is in compliance with this guidance, the statewide "low hazard" exemption and the processing facility plan approval. The listed information is required as part of a processing facility plan of operation and preparation of the approval. After DNR approval of the processing facility plan of operation or modification, the facility may start to operate and the Composting Process Plan and records should be available for inspection at the facility.
Use Plans	• Describe how the compost product is to be stored & used, including recommended application rates & methods. • Use limitations. • List any additional compost product testing. • List records that will be kept. • For public pickup users (small users), develop a document to collect and identify users (name only) and that a use handout was provided.	The composting facility must develop a Use Plan that is suitable for typical large scale user(s) (any business or individual that receives more than 300 yards of compost per year). The Use Plan must be modified, as needed, for each non-typical large scale user. A copy of the pertinent Use Plan must be provided to each large scale user. Smaller scale users don't need a Use Plan, but a copy of the most appropriate Use Plan should be provided upon request.
Product Information & Labeling	Include the following on product information sheets & product labels: • Identify each feedstock & additive materials. • Describe proper use of the product, application rate (if appropriate) and any appropriate precautions (safety and misuse).	Bulk compost and compost product users (not operating under a plan) must be provided a product information sheet . Track public pickup (like home owners) users (name only) and assure that they have been provided use instructions. Bagged compost products must be labeled.

Recordkeeping & Reporting: Table 6 lists recordkeeping for composting facilities and large scale compost users. Event triggered records must be reported immediately to the Department. All records should be kept by the composting facility for a minimum of 5 years.

Table 6. Recordkeeping & Reporting

Who Keeps Records	Required Records	When to Report	Report To
Composting Facility	• Testing on feedstocks, additives, and compost products. • Amount of compost produced. • Amount of compost provided to large-scale users.	Only when requested by DNR.	DNR - appropriate Regional Office
Composting Facility	Documentation of process and physical changes at the composting facility.	Event triggered: prior to implementation of significant changes (A plan modification from DNR) to the facility.	DNR - appropriate Regional Office
Composting Facility	Document any problem meeting screening or not to exceed parameters listed in Tables 3 and 4.	Event triggered: immediately upon discovering the problem.	DNR - appropriate Regional Office
Public Pickup	• Track the name of the individual obtaining the compost product.	Only when requested by DNR.	DNR - appropriate Regional Office
Large Scale Users	• Any additional testing/monitoring on the compost product or use location. • List of use locations and actual application rates. Examples of when site location tracking is vs. isn't needed: - Track farm field and land reclamation site locations. - Don't track locations for bagged compost, or compost used as potting media.	Routine: annual reporting to composting facility. Only when requested by DNR.	Composting Facility, as needed. Only report to the DNR, when requested.

Table 7. Toxicity Equivalency Factors (TEFs) for 29 Dioxin/Furans and Dioxin-like PCBs[7]

Number	Congener	Toxicity Equivalency Factor (TEF)
1	2,3,7,8-TCDF	0.1
2	2,3,7,8-TCDD	1.0
3	1,2,3,7,8-PeCDF	0.05
4	2,3,4,7,8-PeCDF	0.5
5	1,2,3,7,8-PeCDD	1.0
6	1,2,3,7,8-HxCDF	0.1
7	1,2,3,6,7,8-HxCDF	0.1
8	2,3,4,6,7,8-HxCDF	0.1
9	1,2,3,7,8,9-HxCDF	0.1
10	1,2,3,4,7,8-HxCDD	0.1
11	1,2,3,6,7,8-HxCDD	0.1
12	1,2,3, 7,8,9-HxCDD	0.1
13	1,2,3,4,6,7,8-HpCDF	0.01

Number	Congener	Toxicity Equivalency Factor (TEF)
14	1,2,3,4,7,8,9-HpCDF	0.01
15	1,2,3,4,6,7,8-HpCDD	0.01
16	OCDF	0.0001
17	OCDD	0.0001
18	PCB-81	0.0001
19	PCB-77	0.0001
20	PCB-123	0.0001
21	PCB-118	0.0001
22	PCB-114	0.0005
23	PCB-105	0.0001
24	PCB-126	0.1
25	PCB-167	0.00001
26	PCB-156	0.0005
27	PCB-157	0.0005
28	PCB-169	0.01
29	PCB-189	0.0001

7. TEFs presented here are from USEPA documents.

Attachment A – Example "Low Hazard" Exemption

Conditional Grant of Exemption for the Beneficial Use of Certain Compost and Compost Products

[Name of owner/operator] Re: Use of Certain Compost and Compost Products
[Address of owner/operator]

Dear **[Name of owner/operator]**:

The Department is issuing this grant of exemption from regulation under ch. 289, Wis. Stats., for the use of certain compost. The compost must be generated by all or part of the following feedstocks, and be managed and used in compliance with the conditions of this exemption:

- Leaves, grass clippings, yard and garden debris, brush, sawdust, and clean chipped wood.
- Vegetable food waste and readily biodegradable food packaging.
- Farm crop residue, manure and carcasses from agriculture operations.
- Soil.
- Municipal sludge.
- Mixed food and food by-products.
- Readily biodegradable plastics that aren't food packaging.
- Papermill sludge.

This grant of exemption constitutes a Department-issued approval and allows the use of certain compost and compost products, and will terminate ten (10) years from the date of this approval.

The conditions of the approval include using only certain feedstock, requires specific feedstock quality and testing requirements, and that records be maintained by the facility.

Under the authority of the grant of exemption, materials used to make compost or a compost product are exempted from tonnage fees.

If you have any questions concerning this letter, please contact [Staff Name] at [add telephone number].

Sincerely,

[Regional Supervisor's signature block]

cc: Policy Section Chief - WA/3

COMPOST AND COMPOST PRODUCT USE SUMMARY

The Waste Management Program wants to encourage and expand organics recycling through composting. This guidance, developed by the Waste Management Program in conjunction with stakeholders, will eliminate the need for an detailed individual review for use of certain compost and compost products, while assuring protection of public health and the environment through issuance of a Conditional Grant of Exemption (Low Hazard).

This Conditional Grant of Exemption (Low Hazard) requires information to be collected, suitable material types for feedstocks and additive materials, testing and quality issues, information to be provided to compost users, and recordkeeping and reporting. This is consistent with s. 289.43(8)(c), Wis. Stats, which authorizes the Department to require periodic testing of the wastes and impose other conditions.

This Exemption doesn't impact the following:

- The owner of a facility at which compost will be produced must comply with ss. NR 502.08 or 502.12, Wis. Adm. Code, related to facility location, design, operation, monitoring, and other related issues.

- Uses of certain materials are exempt by rule, if used in accordance with the rule exemption. Uses of these materials aren't impacted by this Exemption, unless the composting facility is regulated by s. NR 502.08, Wis. Adm. Code, due to accepting non-exempt materials.

The Conditional Grant of Exemption is for ten years.

BEFORE THE
STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

CONDITIONAL GRANT OF EXEMPTION
FOR
COMPOST AND COMPOST PRODUCT USE AT **[Add the name and address of the facility]**

FINDINGS OF FACT

The Department finds:

1. That certain waste products can be used to make compost and compost products.

2. That the Department would like to divert appropriate wastes from landfills and to encourage the production and beneficial recycling of compost and compost product.

3. That the following waste products can be used to make compost and compost products:

- Leaves, grass clippings, yard and garden debris, brush, sawdust, and clean chipped wood.
- Vegetable food waste and readily biodegradable food packaging.
- Farm crop residue, manure and carcasses from agriculture operations.
- Soil.
- Municipal sludge.
- Mixed food and food by-products.
- Readily biodegradable plastics that aren't food packaging.
- Papermill sludge.

4. That the waste products listed in number 3 (above) have limited pollutants, they can beneficially be used with a low risk to the public and environment.

5. The conditions set forth below are needed to assure that exempted uses of the compost and compost products are conducted in an expeditious manner while preserving the Department's ability to minimize environmental impacts. The conditions set forth in this grant of exemption are necessary to assure protection of the environment and to prevent contamination of surface water. If the conditions are complied with, the proposed exemption will not inhibit compliance with the applicable provisions of ch. 30, 31, 160, and 280 to 299, and ss. 1.11, 23.40, 59.692, 59.693, 60.627, 61.351, 61.354, 62.231, 62.234, and 87.30, Wis. Stats.

CONCLUSIONS OF LAW

1. Based on the foregoing, the Department has the authority under s. 289.43(7), Wis. Stats., and ss. NR 500.08(5), Wis. Adm. Code, to issue a grant of exemption if the exemption would not inhibit compliance with the applicable provisions of ch. 30, 31, 160, and 280 to 299, and ss. 1.11, 23.40, 59.692, 59.693, 60.627, 61.351, 61.354, 62.231, 62.234, and 87.30, Wis. Stats.

2. The Department has authority to approve a grant of exemption with conditions if the conditions are needed to ensure compliance with the applicable provisions of ch. 30, 31, 160, and 280 to 299, and ss. 1.11, 23.40, 59.692, 59.693, 60.627, 61.351, 61.354, 62.231, 62.234, and 87.30, Wis. Stats.

3. The conditions set forth below are needed to ensure compliance with the applicable provisions of ch. 30, 31, 160, and 280 to 299, and ss. 1.11, 23.40, 59.692, 59.693, 60.627, 61.351, 61.354, 62.231, 62.234, and 87.30, Wis. Stats.

4. In accordance with the foregoing, the Department has the authority under s. 289.43(7), Wis. Stats., and NR 500.08(5), Wis. Adm. Code, to issue the following statewide conditional grant of exemption:

STATEWIDE CONDITIONAL GRANT OF EXEMPTION

The Department hereby approves the exemption for the use of compost and compost products at **[add the name and address of the facility]**. The use of compost and compost products shall be subject to the following conditions:

1. That only the following feedstock materials can be used in the making of the compost or compost product:

- Leaves, grass clippings, yard and garden debris, brush, sawdust, and clean chipped wood.
- Vegetable food waste and readily biodegradable food packaging.
- Farm crop residue, manure and carcasses from agriculture operations.
- Soil.
- Municipal sludge.
- Mixed food and food by-products.
- Readily biodegradable plastics that aren't food packaging.
- Papermill sludge.

2. The feedstocks quality shall be limited by the following chart.

Parameters	**Test Method**	**Not to Exceed Values**
pH		2<pH<12 (can't be corrosive and can't be a characteristic listed HW)
metals with codified limits	Methods listed in NR 219, Table EM	As…≤ 41 mg/Kg Ni…≤ 420 mg/Kg Cd…≤ 39 mg/Kg Pb…≤ 300 mg/Kg Cu…≤ 1500 mg/Kg Se…≤ 100 mg/Kg Hg…≤ 17 mg/Kg Zn…≤ 2800 mg/Kg Mo…≤ 40 mg/Kg
dioxins/furans & dioxin-like PCBs	Method 1613 (assume non-detect = zero)	≤ 9.6 ppt total toxicity using "toxicity equivalency factors" (TEFs)

3. The frequency of testing and quality of the compost shall be controlled by the following chart.

Parameters	**Test Method**	**Test Frequency**	**Not to Exceed Values**
pH	Methods listed in NR 219, Table B	10,000 cubic yards	6<pH<8 But accepting a pH outside this range for specialty products.

Parameters	Test Method	Test Frequency	Not to Exceed Values
N, P, & K	Methods listed in NR 219, Table B N: combined total as ammonia nitrite, nitrate, & TKN P & K: total P & total K	none required by DNR	none
pathogens	Methods listed in NR 219, Table EM	5,000 cubic yards (If public pickup is used) or 10,000 cubic yards (if the compost product is used in accordance with a Use Plan that limits contact by humans)	Fecal Coliform max. 1000 MPN / g TS based on geometric mean of at least 7 separate samples or Salmonella max. 3 MPN / 4g TS & meet pathogen reduction operational criteria
stability by temperature measurement OR stability by specific oxygen uptake rate	temperature reading Method listed in NR 219, Table EM	Weekly at several locations within the curing compost pile 10,000 cubic yards	None -doesn't reheat at optimum oxygen & moisture None

4. The composting plan, compost "use plan" and product information shall be controlled by the following chart.

Document	Document Contents	What Must Be Done with the Documents?
Composting Process Plan	• Maintain a current list of feedstocks & additives used. • Document (written) description of the processing equipment & methods, including pre-processing, primary processing, post-processing, & storage. • List tests that will be performed, monitoring frequency & limits for feedstocks, additives, & the composting process. Document (written) how the tests are used to properly operate the composting process & control compost product quality, & describe the expected compost quality. • Document (written) how off-spec products will be handled. • Document (written) what and how records will be kept.	The operator doesn't need to submit a compost (operations) plan to DNR for review but needs to assure that their operation is in compliance with this guidance, the statewide "low hazard" exemption and the processing facility plan approval. The listed information is required as part of a processing facility plan of operation and preparation of the approval. After DNR approval of the processing facility plan of operation or modification, the facility may start to operate and the Composting Process Plan and records should be available for inspection at the facility.
Use Plans	• Describe how the compost product is to be stored & used, including recommended application rates & methods. • Use limitations. • List any additional compost product testing. • List records that will be kept. • For public pickup users (small users), develop a document to collect and identify users (name	The composting facility must develop a Use Plan that is suitable for typical large-scale user(s) (any business or individual that receives more than 300 yards of compost per year). The Use Plan must be modified, as needed, for each non-typical large-scale user. A copy of the pertinent Use Plan must be provided to each large-scale user.

Document	Document Contents	What Must Be Done with the Documents?
	only) and that a use handout was provided.	Smaller scale users don't need a Use Plan, but a copy of the most appropriate Use Plan should be provided upon request.
Product Information & Labeling	Include the following on product information sheets & product labels: • Identify each feedstock & additive material. • Describe proper use of the product, application rate (if appropriate) and any appropriate precautions (safety and misuse).	Bulk compost and compost product users (not operating under a plan) must be provided a product information sheet. Track public pickup (like home owners) users (name only) and assure that they have been provided use instructions. Bagged compost products must be labeled.

5. The recordkeeping and reporting shall be controlled by the following chart.

Who Keeps Records	Required Records	When to Report	Report To
Composting Facility	• Testing on feedstocks, additives, and compost products. • Amount of compost produced. • Amount of compost provided to large scale users.	Only when requested by DNR.	DNR - appropriate Regional Office
Composting Facility	Documentation of process and physical changes at the composting facility.	Event triggered: prior to implementation of significant changes (A plan modification from DNR) to the facility.	DNR - appropriate Regional Office
Composting Facility	Document any problem meeting parameter limits listed in Tables 3 and 4.	Event triggered: immediately upon discovering the problem.	DNR - appropriate Regional Office
Public Pickup	• Track the name of the individual obtaining the compost product.	Only when requested by DNR.	DNR - appropriate Regional Office
Large Scale Users	• Any additional testing/monitoring on the compost product or use location. • List of use locations and actual application rates. Examples of when site location tracking is vs. isn't needed: -Track farm field and land reclamation site locations. -Don't track locations for bagged compost, or compost used as potting media.	Routine: annual reporting to composting facility. Only when requested by DNR.	Composting Facility, as needed. Only report to the DNR, when requested.

6. This exemption shall terminate ten (10) years from the date of this grant of exemption.

The Department reserves the right to require the submittal of additional information and to modify this grant of exemption at any time, if in the Department's opinion, modifications are necessary.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

For judicial review of a decision pursuant to section 227.52 and 227.53, Wis. Stats., you have thirty (30) days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

DEPARTMENT OF NATURAL RESOURCES
For the Secretary

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[Regional Supervisor's signature block]

cc: Policy Section Chief -WA/3